

REMARKS/ARGUMENTS

This amendment is in response to the Office Action of June 14, 2004. Claims 1-21 are pending in the application. Applicants address each paragraph, as numbered in the Office Action.

Page 2, Paragraph 1 Rejection of Claims 1-21 under 35 U.S.C. §112 2nd paragraph

Claims 1-21 were rejected under 35 U.S.C. §112 2nd paragraph as being indefinite for failing to point out and distinctly claim the invention. Several reasons for rejecting the claims were given, and Applicants respond per the sequence of rejections.

1. The Examiner alleged the Applicants specify the addition of an SF₅ group to a terminal alkene but fails to mention that bromine is added, too.

Response: An amendment has been made to show in the preamble of Claims 1 and 6 that bromine was added by the claimed reaction in addition to the SF₅ group. Although, the claimed reaction illustrated that both an SF₅ group and Br were added by the reaction, from Applicants' perspective the group of interest, and most difficult to add, was the SF₅ group. Bromine is eliminated from the compound in as subsequent reaction. Thus, it was the only group mentioned.

2. The Examiner objected to the term "effecting" employed in Claims 1 and 6 in reference to "reacting".

Response: That term has been deleted as the term "reacting" is sufficiently clear to satisfy the statute.

3. The Examiner objected to the phrase "liquid phase conditions" as being vague and indefinite. The Examiner suggested several scenarios to illustrate ambiguity, as for

example, whether a solid must be melted before reacting with another liquid. Did the terminology require a certain temperature, suggesting some temperatures would result in the olefin being a solid?

Response: Reconsideration on that point is requested. The second element of Claim 1 calls for condensing SF₅Br in the terminal alkene and then reacting under liquid phase conditions. That language simply means the reaction medium is present as a liquid phase and the reaction carried out under liquid phase conditions. The examples and description in the specification are clear in that the reaction medium is liquid phase, in contrast to gas phase (page 15, paragraph 0058). Also, per the Examiner's query, it is Applicants attorney's view that if a reaction of a solid was taking place in a liquid medium, then, the reaction was being carried out under liquid phase conditions. Therefore, reconsideration of the objection is requested in light of the arguments.

4. The amount of 1-25% was recited without reference.

Response: An amendment has been made to indicate it is in reference to the moles of olefin employed. Support is found at page 7. Paragraph 0024.

5. Claim 9 was reported as having an e.g. in its structure. Applicants submit the Examiner may have intended the objection was in Claim 10.

Response: An amendment has been made.

6. Claims 16 and 17-21 were objected to as reciting "compositions represented by the structures" instead of "compounds".

Response: An amendment has made reciting the structures as compounds per the Examiner's suggestion.

Editorial amendments were made to Claim 2, to render the claim language consistent. Claims 10, 11, and 12, were amended to recite that the amount of catalyst was based per mole of olefin bond as noted in original Claim 11 and in the specification at page 7, paragraph 0022.

Apparent Rejection Under 35 U.S.C. §103(a) Over Ayt-Mohand, et al

At page 4, paragraph 2, the Examiner commented with respect to the teachings of Ayt Mohand, et al vis-à-vis the claims in the present application that the addition of an SF₅ group to a terminal olefin was accomplished through the use of SF₅Cl as a reactant, not SF₅Br. Winter, et al in JOC (1994) was cited as disclosing that SF₅Cl and SF₅Br can add across double bonds. But, as the Examiner acknowledged the text, "Chemistry of Hypervalent Compounds" (1999) discloses there is no predictable equivalence between SF₅Cl and SF₅Br. Therefore, in view of the fact that there was no straightforward chemistry, a rejection under 35 U.S.C. §103(a) could not be made.

CONCLUSION:

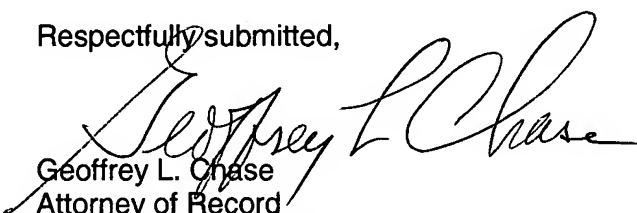
The Examiner in the conclusions section at pages 5 and 6 noted the article by Winter, et al showing the reaction of SF₅Br with a terminal olefin having an OAc group is precluded by Applicants' claims. The Examiner also noted other art at page 6 and differentiated Applicants' claims from such art. Applicants' attorney would also note that the Applicants

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also had pointed out the reaction with olefins with SF₅Br had been accomplished where the alkenes included electron withdrawing groups, such as; Cl, OAc and the like (page 3, paragraph 0012).

In view of the foregoing, it is respectfully requested the application be reconsidered in light of the amendment to the claims, and after reconsideration, the application be passed to issue.

Respectfully submitted,



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